



Repeater: NØDX 145.190 MHz (Input 144.590 / Tone 192.8 Hz)

The Eastern Iowa DX Bulletin

Number 254, December 27, 2024

Craig Fastenow, KØCF, Editor

This bulletin is a compilation of **currently active** DX operations (or those that will become active within the current week) from recent issues of the three DX bulletins listed below and other sources. Credit for the source is given at the end of each article.

Articles are ordered by the entity's callsign prefix from the *ARRL DXCC Entities List*. Callsigns used are in **bold** with dates of operation highlighted in **red**. Clickable links are provided for QSL and other information wherever possible. Note that articles may be edited for grammar, language, style and accuracy and will remain in *The Bulletin* while active; articles that are announcements of ongoing operations, or that have no specified end date, will be removed after three weeks.

Also included is a [Propagation](#) section, updated daily; and a [Contest Calendar](#) of upcoming popular contests.

DX News items are courtesy of:

The ARRL DX Bulletin

The bulletin is available at <http://www.arrl.org>

425 DX News, A.R.I. DX Bulletin (425DXN)

Edited by Mauro Pregliasco, I1JQJ & Valeria Pregliasco, IK1ADH

425 DX News Home Page: <https://www.425dxn.org/>

425 DX News Google Group: <https://groups.google.com/g/425eng>

DX Newsletter (DXNL)

Edited by Andreas Salder, DK5ON

A weekly service of DARC Committee "DX", <http://www.darcdxhf.de>

Ohio-Penn DX Bulletin (OPDX)

Edited by Tedd Mirigliotta, KB8NW. Although OPDX is no longer published as a weekly bulletin, Tedd still sends DX news emails.

We will occasionally publish some of them.

Propagation data is from:

National Oceanic and Atmospheric Administration's

[Space Weather Prediction Center](#)

Dr. Tony Phillips' [SpaceWeather.com](#), used by permission

Contest data courtesy of the [WA7BNM Contest Calendar](#)

DX News

3B8, MAURITIUS. Thomas, DJ2TG is QRV as **3B8/DJ2TG** until December 30th. Activity is holiday style on 30 to 10 meters using SSB, FT8, and FT4. QSL via [DJ2TG](#).

-[ARRL DX Bulletin # 48 December 26, 2024] (1227-0103)

3D2, FIJI. Gerhard, OE3GEA is QRV as **3D2GE** from Nadi (OC-016) and Nacula (OC-156) until January 7th. Activity is holiday style on 30 to 10 meters using only CW. QSL via [OE3GEA](#).

-[ARRL DX Bulletin # 48 December 26, 2024] (1227-0110)

4X, ISRAEL. To celebrate the Jewish holiday of Hanukkah, the Israel Association of Radio Communication (formerly known as Israel Amateur Radio Club) will be running special event stations **4X8NER** and **4Z8NER** from **December 25th to January 2nd**. A certificate will be available: <https://tools.iarc.org/chanukah24/>. QSL via LoTW, eQSL, or via [4Z5MU](#).
-[425DXN # 1754 December 14, 2024] (1220-0103)

5R, MADAGASCAR. Eric, F6ICX is active again as **5R8IC** from Sainte-Marie Island (AF-090), Madagascar **until the end of the year**. He will operate mainly CW on 40-10 meters; during the last two weeks of December he will also be QRV on the QO-100 satellite. QSL via LoTW, [ClubLog's OQRS](#), or via [F6ICX](#).
-[425DXN # 1742 September 21, 2024] (0927-0103)

8R, GUYANA. Aldir, PY1SAD will be active again as **8R1TM** from Georgetown, Guyana from **January 1st to February 8th**. He will operate CW, SSB and digital modes on all bands and via satellite. QSL via LoTW, eQSL, QRZ Logbook, or direct via [PY1SAD](#).
-[425DXN # 1755 December 21, 2024] (1227-0207)

9V, SINGAPORE. Celebrating the 60th anniversary since Singapore became an independent republic (August 9, 1965), Singapore Amateur Radio Transmitting Society's members are allowed to replace their normal prefix (9V1) with the special prefix **S6Ø** from **January 1st through August 9th**. For instance, SARTS President 9V1SA will be using **S6ØSA**.
-[425DXN # 1756 December 28, 2024] (1227-0117)

9Y, TRINIDAD & TOBAGO. Earl, WA3DX will be QRV as **9Y4/WA3DX** from Trinidad (SA-011) from **December 29th to January 14th**. Activity will be 40 to 10 meters using FT8 and FT4. QSL via [WA3DX](#).
-[ARRL DX Bulletin # 48 December 26, 2024] (1227-0117)

A4, OMAN. Special event station **A43QAT** is QRV to mark Qatar's National Day. QSL via [EC6DX](#).
-[ARRL DX Bulletin # 46 December 12, 2024] (1213-0103)

CE9, ANTARCTICA. Oleg ZS1ANF (ex UA1PBA) will be active during his spare time as **ZS7ANF** from Wolf's Fang Runway (AN-016). QRV mostly on CW on 40-10m **until February 2025**. QSL via [DL5EBE](#) or [RK1PWA](#), LoTW.
-[DXNL # 2436 December 11, 2024] (1213-0103)

CN, MOROCCO. Ralf, DB4REB will be active as **CN2REB** while vacationing in Morocco from **November 30th to January 30, 2025**. He plans to operate CW, FT8 and SSB on various bands from Agadir and some POTA sites along the coast. See <https://www.qrz.com/db/CN2REB> for updates. QSL via eQSL, or [DB4REB](#).
-[425DXN # 1751 November 23, 2024] (1129-0131)

CT, PORTUGAL. Celebrating the New Year, special callsign **CS2Ø25HNY** will be active from Portugal on **January 1st-7th**. QSL via [CT1REP](#).
-[425DXN # 1756 December 28, 2024] (1227-0110)

DXCC TOP TWENTY. Here are the top 20 entities on ClubLog's "DXCC Most Wanted" list as of December 27, 2024:

1. P5	DPRK (North Korea)	11. ZS8	Prince Edward & Marion Islands
2. BS7H	Scarborough Reef	12. KH4	Midway Island
3. CEØX	San Felix Islands	13. VKØM	Macquarie Island
4. BV9P	Pratas Island	14. PYØS	Saint Peter And Paul Rocks
5. KH7K	Kure Island	15. KP5	Desecheo Island
6. KH3	Johnston Island	16. VPØS	South Sandwich Islands
7. 3Y/P	Peter 1 Island	17. ZL9	New Zealand Subantarctic Islands
8. FT5/X	Kerguelen Island	18. FK/C	Chesterfield Islands
9. YVØ	Aves Island	19. VKØH	Heard Island
10. 3Y/B	Bouvet Island	20. FT/T	Tromelin Island

For the complete list, see <https://clublog.org/mostwanted.php>

-[KØCF December 27, 2024] (1227-0117)

E7, BOSNIA-HERZEGOVINA. Special event station **E71YOTA** is QRV during the **month of December** during the Youth On The Air operating event. QSL via [ClubLog's OQRS](#).

-[ARRL DX Bulletin # 45 December 5, 2024] (1206-0103)

FO, FRENCH POLYNESIA. Hardy, DL7JLL is QRV as **FO/DL7JLL** from Mangareva Island (OC-063) **until January 15th**. Activity is on 20, 15, and 10 meters using SSB. QSL to [DL7JLL](#).

-[ARRL DX Bulletin # 47 December 19, 2024] (1220-0117)

FR, REUNION I. Thomas, DJ2TG is QRV as **FR/DJ2TG** **until December 23rd**. Activity is on 30 meters and up using SSB and FT8. QSL to [DJ2TG](#).

-[ARRL DX Bulletin # 46 December 12, 2024] (1213-0103)

FS, SAINT MARTIN. Oleh, UR5BCP will be QRV as **FS/UR5BCP** from **December 26th to January 2nd**. Activity will be on 40 to 15 meters using CW. This might include activity from Sint Maarten if he obtains a license. QSL via [KD7WPJ](#).

-[ARRL DX Bulletin # 47 December 19, 2024] (1220-0103)

FY, FRENCH GUIANA. Joe, OZØJ, is QRV as **TOØJ** **until December 31st** on 80-10m (FT8, some CW and SSB) with vertical antennas. For more information see: <https://to0j.oz0j.dk>. QSL via [ClubLog's QRSS](#), LoTW or via [OZØJ](#).

-[DXNL # 2437 December 18, 2024] (1220-0103)

GW, WALES. Kev, GWØPUH will be active as **GB9KW** on **January 1st-28th** using vintage equipment manufactured by KW Electronics Ltd during the 1960s and 1970s. Main activity will be over the "KW Weekend" (**January 4th-5th**). Other special callsigns are expected to be on the air, notably **GB2KW** from Scotland, **GB5KWD** and **GB6KW** from England, and possibly others. QSL via operator's instructions.

-[425DXN # 1756 December 28, 2024] (1227-0131)

HC8, GALAPAGOS IS. Gus, HC2FG will be active again as **HD8FG** from Santa Cruz, Galapagos Islands (SA-004) from **December 29th to January 3rd**. He will be QRV on 6 meters FT8 only. QSL via LoTW, or [HC2FG](#).

-[425DXN # 1755 December 21, 2024] (1227-0103)

HL, SOUTH KOREA. Special event station **HLØYOTA** is QRV during the **month of December** during the Youth On The Air operating event. QSL via [ClubLog's QRSS](#).

-[ARRL DX Bulletin # 45 December 5, 2024] (1206-0103)

HZ, SAUDI ARABIA. Special event station **HZ1QATAR** is QRV to mark Qatar's National Day. QSL via [EC6DX](#).

-[ARRL DX Bulletin # 46 December 12, 2024] (1213-0103)

J7, DOMINICA. Team **J75K** (FM5WD, IK3ZAQ and IV3JVJ) will be active from Dominica (NA-101) from **December 26th to January 4th**. They will operate SSB, CW and FT8/FT4 on 160-6 meters. See <https://j75k.jimdofree.com> for more information. Log search on ClubLog. QSL via LoTW, or direct to [IV3JVJ](#).

-[425DXN # 1753 December 7, 2024] (1220-0103)

JD1/O, OGASAWARA. Harry, JG7PSJ will be QRV as **JD1BMH** from Chichijima (AS-031) from **December 23rd to January 3rd**. Activity will be on 80 to 10 meters using CW, SSB, and RTTY. QSL direct to [JG7PSJ](#).

-[ARRL DX Bulletin # 47 December 19, 2024] (1220-0103)

K, UNITED STATES. The Straight Key Century Club's annual on-air event, commemorating the club's founding in 2006 and celebrating the original instruments of early radiotelegraphy (straight key, bug and cootie keys), will run on **January 2nd-31st**. Look for **K3Y** to be aired from the ten US call areas (**K3Y/Ø** through **K3Y/9**), plus **/KH6**, **/KL7** and **/KP4**. Information on the event and QSL instructions can be found on <https://skccgroup.com/k3y/k3y.php>.

-[425DXN # 1756 December 28, 2024] (1227-0131)

K, UNITED STATES. Club station **W2HRU** will be QRV from **December 30th to January 4th** to mark the 26th annual Ham Radio University educational conference. Look for SSB activity on 80, 40 and 20 meters, as well as FT8 on multiple bands. In addition, a printable QSL Certificate will be available.

Detailed information on <https://hamradiouniiversity.org/>. QSL via LoTW, eQSL, the W2 QSL Bureau or direct to [KA2D](#).

-[425DXN # 1754 December 14, 2024] (1227-0103)

KHØ, MARIANA ISLANDS. Ken, JO1VRK plans to be QRV as **KHØ/AJ6VJ** from Saipan (OC-086) from **December 30th to January 3rd**. Activity will be on 40 to 10 meters using CW, SSB, RTTY, FT8, and FT4. QSL via LoTW.

-[ARRL DX Bulletin # 48 December 26, 2024] (1227-0103)

KH9, WAKE I. Currently stationed on Wake Island (OC-053), Allen, KH7AL is QRV as **KH7AL/KH9** in his spare time. Next planned activities:

December 22nd +/- 20:00 UTC on 10m SSB

December 23rd +/- 08:00 UTC on 17m SSB

December 29th +/- 20:00 UTC on 17m SSB

December 30th +/- 08:00 UTC on 17m SSB

He keeps an "Activation Blog" and an "Upcoming" section on <https://sites.google.com/view/kh7al/>. QSL via [KH7AL](#).

-[425DXN # 1755 December 21, 2024] (1220-0103)

LA, NORWAY. Special callsign **LA1ØØA** is the for NRRL's Midt-Troms Gruppen (LA6M, <https://www.la6m.no/>) to use **throughout 2025** to mark the 100th anniversary of the first amateur radio two-way contact between Norway and the US, made by Johannes Diesen, LA1A from Moen in Malselv municipality and UIYB at Dartmouth College, Hanover, New Hampshire (November 25, 1925). QSL via the bureau, QRZ Logbook, or via [LA1ØØA](#).

-[425DXN # 1756 December 28, 2024] (1227-0124)

LY, LITHUANIA. Special callsign **LY24XMAS** will be active **throughout December**. LY2QT offers a commemorative coin for 10 QSOs with special event stations carrying an XMAS or HNY suffix; one QSO with LY24XMAS is obligatory and 5 Euro for covering postage; send your application to LY2QT, ly2qt.wal@gmail.com. QSL LY24XMAS via [LY2QT](#).

-[DXNL # 2435 December 4, 2024] (1206-0103)

OE, AUSTRIA. Special event station **OE65XMAS** is QRV **until January 6th**. QSL via bureau.

-[ARRL DX Bulletin # 47 December 19, 2024] (1220-0110)

OH, FINLAND. Once again Santa Radio, **OF9X** (Old Father Nine Xmas) will be active on **December 13th-31st** on 160-6 meters CW, SSB and FT8. QSL via Club Log's OQRS, or via OH2BH. Each operator will send his suffix as part of the report (e.g. 599BH for Martti, OH2BH). You can contact a maximum of 16 Santa operators on a variety of bands and modes, which makes up your Santa total score. This time the score card is reported on <https://www.qrz.com/db/OF9X>. The Santa Radio operators are:

Rami OH2BCI (BCI)	Juha OH2LQ (LQ)
Martti OH2BH (BH)	Pekka OH2TA (TA)
Davide OH2BLS (BLS)	Henri OH3JR (JR)
Era OH2CV (CV)	Pauli OH5BQ (BQ)
Artu OH2FB (FB)	Alex OH5UY (UY)
Jorma OH2KI (KI)	Reijo OH7GGX (GGX)
Jyri OH2KM (KM)	Tero OH7WP (WP)
Arto OH2KW (KW)	Esa OH7WV (WV)

-[425DXN # 1754 December 14, 2024] (1213-0103)

ON, BELGIUM. The radio club Verviers (ON4GDV) commemorates the 80th anniversary of Belgium's liberation and the Battle of the Bulge until the end of the year with the callsign **OR8ØUSA**. QSL via [ON4GDV](#).

-[DXNL # 2436 December 11, 2024] (1213-0103)

ON, BELGIUM. Special event station **OQ24YOTA** is QRV during the **month of December** during the Youth On The Air operating event. QSL via [ClubLog's OQRS](#).

-[ARRL DX Bulletin # 45 December 5, 2024] (1206-0103)

OZ, DENMARK. Special callsign **OZ4ØØPOST** will be used by members of Experimenterende Danske Radioamatoerer to celebrate the 400th anniversary of the Royal Danish Post Office, established on December 24, 1624, under King Christian IV. Watch for activity from **December 24th to January 5th**. See <https://www.qrz.com/db/OZ400POST> for information about the Post Award. QSL via [ClubLog's QQRS](#) (preferred), or via the bureau to [OZ1ACB](#).

-[425DXN # 1755 December 21, 2024] (1220-0110)

PA, NETHERLANDS. Special callsign **PC8ØTT** is the for members of VERON Leiden (PI4LDN) to celebrate the 80th anniversary of the liberation of the Netherlands during World War II (May 5, 1945). Look for activity from **January 1st until June 1st**. The special callsign honors the memory of Rudolf Tappenbeck (PCTT), a pioneer of Dutch amateur radio who died in Neuengamme concentration camp on December 21, 1944. QSL via the bureau to [PI4LDN](#).

-[425DXN # 1756 December 28, 2024] (1227-0124)

PA, NETHERLANDS. Celebrating Christmas and the New Year, special callsign **PH24XMAS** will be active on **December 6th-28th**, followed by **PH25HNY** from **December 28th to January 5th**. Paper QSL cards will not be provided.

-[425DXN # 1752 November 30, 2024] (1206-0110)

PA, NETHERLANDS. Barry, PC1K will be active as **PC24XMAS** in **December**. A certificate will be downloadable from <https://pc1k.nl/xmas> "immediately after making a QSO". QSL via [PC1K](#), LoTW, or QRZ Logbook.

-[425DXN # 1752 November 30, 2024] (1129-0103)

PA, NETHERLANDS. Celebrating Christmas and the New Year, special callsigns **PA24XMAS**, **PD24ELF** and **PI24XMAS** will be active on **December 1st-31st**, while **PD25HNY** will be QRV from **December 24th until January 31st**. See <https://www.qrz.com/db/PI24XMAS> for a certificate. QSL cards will not be issued.

-[425DXN # 1751 November 23, 2024] (1129-0103)

PACIFIC TOUR. Reportedly, Gerhard, OE3GEA will be active holiday style from New Caledonia, Fiji, Vanuatu, Samoa, American Samoa and Hawaii from **December 20th to January 21st**:

December 20th-25th	TX24HAID	Noumea (OC-032)
December 25th-Jan. 7th	3D2GE	Nadi (OC-016)/Nacula (OC-156)
December 27th-30th	YJØGE	Port Vila (OC-035)
January 9th-12th	5WØGE	Apia (OC-097)
January 12th-15th	KH8/OE3GEA	Pago Pago (OC-045)
January 18th-21st	KH6/OE3GEA	Hawaii

He will operate CW on 30-10 meters. QSL via [OE3GEA](#).

-[425DXN # 1754 December 14, 2024] (1220-0124)

PACIFIC TRIP. Hardy, DL7JLL will be active as **FO/DL7JLL** from Mangareva (OC-063), French Polynesia and as **VP6JLL** from Pitcairn Island (OC-044) from **December 18th to January 15th**. He will operate SSB only on 20, 15 and 10 meters. QSL via [DL7JLL](#).

-[425DXN # 1754 December 14, 2024] (1213-0117)

PY, BRAZIL. The Bicho do Mato DX Team celebrates its 10th anniversary with the callsign **ZV2BM** throughout **December**. QSL via bureau, LoTW, eQSL.

-[DXNL # 2435 December 4, 2024] (1206-0103)

S5, SLOVENIA. Special event station **S525PMC** will be active from **December 5th to January 5th** to promote the PMC Contest, sponsored by the Radio Club Slovenj Gradec (S59DCD). The International Association of Peace Messenger Cities was established in 1988 to recognize and encourage the role and responsibility cities have in creating a culture of peace. The PMC Contest, promoting contacts between stations located in the Peace Messenger Cities and the rest of the world, will be held on January 4th-5th. Complete information can be found on <https://www.s59dc.si/index.php/sl/ww-pmc/ww-pmc-contest-rules>. QSL via eQSL.

-[425DXN # 1753 December 7, 2024] (1206-0103)

SP, POLAND. Celebrating Christmas and the New Year, special callsigns **HFØCLAUS** and **SPØCLAUS** will be active from **December 6th to January 6th**. QSL via the bureau, eQSL, or direct to Dariusz Florczyk, ul. Kozminska 35, 63-330 Dobrzyca, Poland.

Other special callsigns for the festive season include **3ZØXMAS** (Poland), **EG7FN** (Spain, **December 10th-25th**), **I12XMAS** (Italy, **November 29th-January 6th**), **LY24XMAS** (Lithuania, **December 1st-31st**), **OE65XMAS** (Austria, December 20th-January 6th), **OZ4XMAS** (Denmark), **PD2Ø25HNY** (Netherlands, **December 23rd-31st**), **TM2Ø24MC** (France), **VK6SANTA** (Australia, **December 1st-24th**), **YR8XMAS** (Romania, **December 1st-January 5th**). See their qrz.com pages for more information.

-[425DXN # 1753 December 7, 2024] (1206-0103)

SU, EGYPT. Special event station **SU8YOTA** is QRV during the **month of December** during the Youth On The Air operating event. QSL via [ClubLog's QRSS](#).

-[ARRL DX Bulletin # 45 December 5, 2024] (1206-0103)

T32, EAST KIRIBATI. The Rebel DX Group is QRV as **T32TTT** from Kiritimati (Christmas Island, OC-024), East Kiribati **until January 1st**. This is a 2-man activity, with planned operations on 160-6 meters CW (two stations), SSB (one station) and FT8/FT4 (as many as twelve stations). QSL via [ClubLog's QRSS](#) for LoTW and direct cards.

-[425DXN # 1755 December 21, 2024] (1220-0103)

TJ, CAMEROON. Thierry, TK1CX is QRV as **TJ/TK1CX** **until the end of February**. Activity is in his spare time on 20 to 10 meters using mostly FT8 and low power. QSL via LoTW, eQSL, or [EA5ZD](#).

-[ARRL DX Bulletin # 47 December 19, 2024] (1220-0228)

UA, EUROPEAN RUSSIA. Special callsigns **R2Ø25NY** and **UE25NY** will be active from **December 29th to January 8th** for the annual Russian New Year radio marathon organized by the Miller DX Club (<https://mdxc.ru/>). QSL via [RQ7L](#).

-[425DXN # 1754 December 14, 2024] (1227-0110)

V4, ST. KITTS & NEVIS. Brian, GW4DVB will be QRV as **V4/G4DVB** from Calypso Bay, St. Kitts (NA-104) from **December 31st to January 6th**. Activity will be on 160 to 6 meters using CW, SSB, and various digital modes. QSL via [GW4DVB](#).

-[ARRL DX Bulletin # 48 December 26, 2024] (1227-0110)

VP6, PITCAIRN I. Hardy, DL7JLL, signs **VP6JLL** from Pitcairn Island (OC-044) from **December 18th to January 15th**. QRV on 20, 15, and 10m with 50W and a wire antenna on SSB. QSL via [DL7JLL](#).

-[DXNL # 2437 December 18, 2024] (1220-0117)

VU, INDIA. Kaustav, VU2UUU is QRV with special call sign **AT2Ø25** **until January 15th** while studying winter propagation, and monitoring solar cycle conditions. Activity is on the HF bands using CW and SSB. QSL via operator's instructions.

-[ARRL DX Bulletin # 47 December 19, 2024] (1220-0117)

YL, LATVIA. Special event station **YL24YOTA** is QRV during the **month of December** during the Youth On The Air operating event. QSL via [ClubLog's QRSS](#).

-[ARRL DX Bulletin # 45 December 5, 2024] (1206-0103)

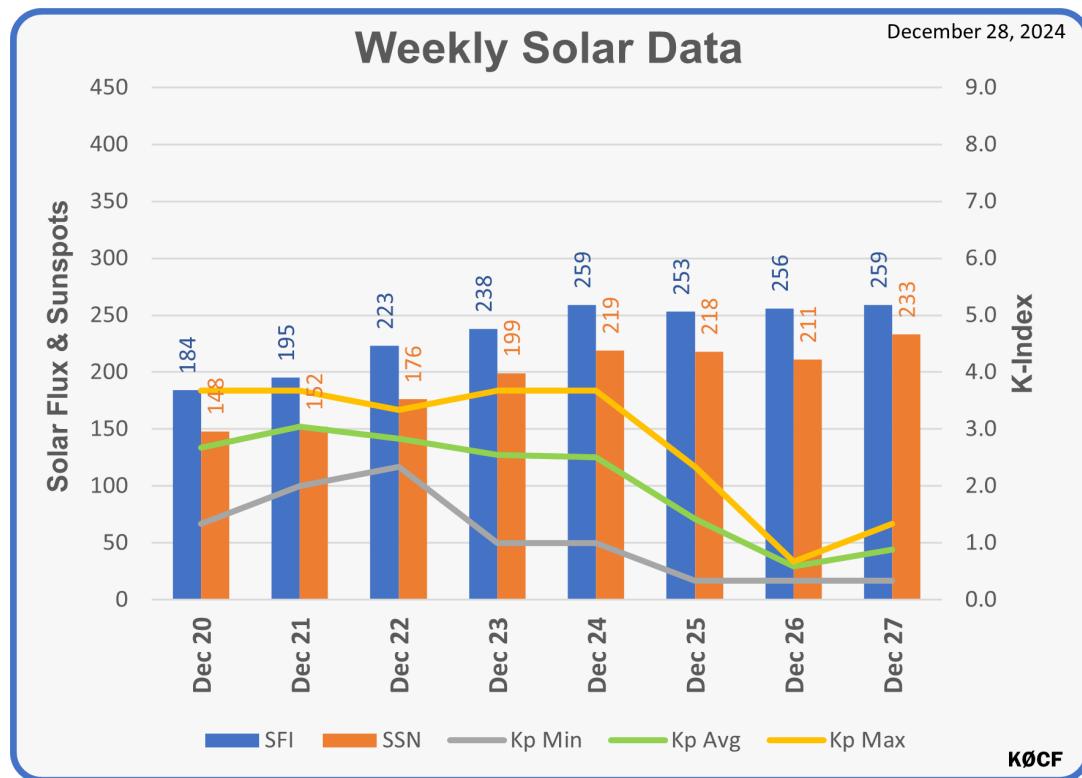
ZD7, ST. HELENA. Derek, **ZD7CTO** has been active on 40 meters using FT8 between 0300 and 0400z. QSL direct to [ZD7CTO](#).

-[ARRL DX Bulletin # 46 December 12, 2024] (1213-0103)

ZS, SOUTH AFRICA. On May 20, 2025, the South African Radio League will celebrate its 100th anniversary. The SARL Centenary Marathon QSO Party is set to kick off for a year-long operating event starting from **0000 UTC on January 1st and ending at 2359 UTC on December 31st**. Throughout the year, the SARL, with the aid of its members and associated clubs, will be on the air with a special event callsign **ZS1ØØSARL**, as well as the permanent callsigns **ZS6SRL** and **ZS9HQ**, and possibly other special event callsigns. A number of awards will be available, see <https://mysarl.org.za/centenary-marathon/> for more information.

-[425DXN # 1756 December 28, 2024] (1227-0124)

Propagation (Updated daily)



The Weekly Solar Data chart plots Solar Flux Index (SFI), Sunspot number (SSN) and Planetary K-Index (Kp) for the past 8 days. With 8 Planetary K-index readings each day, only the minimum, average and maximum K-index values are plotted. **Note:** You may click [here](#) or on the chart above to see the same data for the past month.

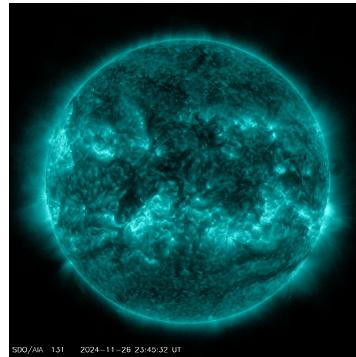
The Daily Solar Flux Index, Sunspot number, Planetary K-index, Solar Flux predictions and Solar Flare data used in this bulletin have been collected by KØCF from the U.S. Department of Commerce's NOAA Space Weather Prediction Center.

The propagation graphs above are the creations of KØCF and are unique in space weather reporting.

Please Note: The graphs are high resolution .PNG files which you may view in greater detail using your browser's "zoom" feature. Alternatively, right click on the graph and select "Open Image in New Tab" to enlarge it, or "Save Image As..." to save it to your computer for further analysis.

NASA's current view of the Sun at a wavelength of 131 Angstroms. This wavelength shows incredible solar detail.

Click [here](#) or on the image to view as a full screen 48-hour video loop. It is fascinating!



Propagation Summary

For the 8 day period from Friday, December 20th through yesterday, December 27th.

The average solar flux was 240, up 67 points from the previous week, with a weekly high of 259 on Friday, December 27th, following a low of 184 on December 20th.

The average sunspot count was 201, up 103 from last week, peaking at 233 on Friday, December 27th after a weekly low of 148 on December 20th.

The Planetary K-index weekly average was 2.8 with a maximum of 3.7 on Tuesday, December 24th, resulting in generally quiet geomagnetic conditions. Yesterday's K-index maximum was 1.3 with generally quiet conditions.

Solar flare activity since December 21st has been high with 12 major flares, the largest of which was an M 8.9 event on Monday, December 23rd.

Propagation Data

Major solar flares, Saturday, December 21st through 1345 UTC, December 28th.

#	Date	UTC	Mag.
1	Dec 28	1121	M 4.5
2	Dec 27	2035	M 3.3
3	Dec 27	1538	M 1.2
4	Dec 26	0315	M 7.3
5	Dec 26	0030	M 3.0
6	Dec 25	0449	M 4.9
7	Dec 25	0430	M 2.8
8	Dec 24	0841	M 4.1
9	Dec 24	0019	M 4.7
10	Dec 23	1112	M 8.9
11	Dec 22	2049	M 1.1
12	Dec 21	0038	M 1.9

(NOAA's graph of recent flare activity: [GOES-X-Ray-Flux](#))

From the NOAA Space Weather Prediction Center, here are the probabilities of major solar flares and the predicted 10.7 cm Solar Flux for the next 3 days. NOAA updates this information daily.

Date	M-Flares	X-Flares	Solar Flux
Dec 28	70%	20%	260
Dec 29	70%	20%	260
Dec 30	75%	25%	240

Looking farther ahead, here is the NOAA Space Weather Prediction Center forecast of 10.7 cm radio flux and maximum Planetary K-index (Kp) for the next 12 days. This data is updated by NOAA every Monday (last updated on December 23, 2024).

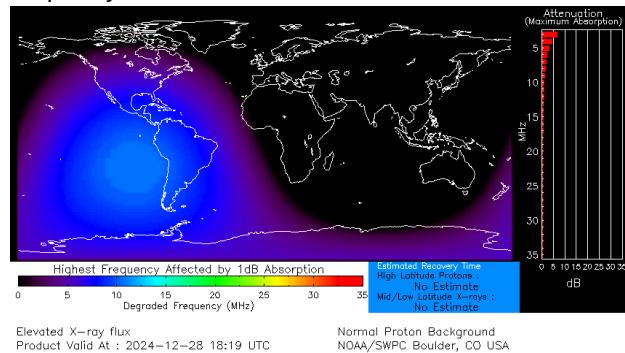
Date	Flux	Kp
Dec 28	190	2
Dec 29	190	2
Dec 30	185	2
Dec 31	175	2

Date	Flux	Kp
Jan 1	180	2
Jan 2	180	2
Jan 3	180	2
Jan 4	175	2

Date	Flux	Kp
Jan 5	170	4
Jan 6	170	3
Jan 7	160	2
Jan 8	160	2

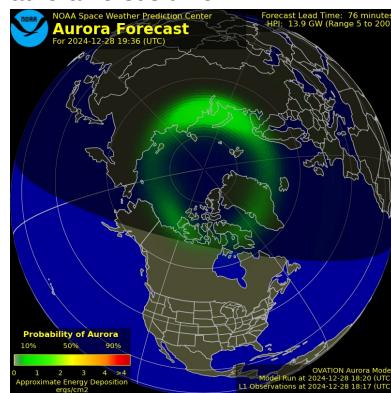
Global D Region Absorption

Conditions in the D-region of the ionosphere have a dramatic effect on HF communications. The D-Region Absorption map combines the effects of solar particles and photons. Yellow to red colors on the map depict increasing signal attenuation, where the bar chart at the right displays attenuation versus frequency. Click the thumbnail below for an animated map of D-Region Absorption:



The Aurora Borealis

The aurora is not only beautiful to see but can have a profound impact on HF and VHF radio propagation. For the HF operator, auroras can result in a complete shut-down of propagation. However, on VHF, auroras present interesting DX possibilities. Beam antennas are very desirable and should be pointed north, towards the aurora. Signals are reflected by "back-scatter" and will be distorted with a rough buzz. SSB is the best voice mode to use, but copy can be difficult. CW will have a rough buzzy sound but be perfectly copyable. Click the thumbnail below for an animated map of aurora versus time:



Highs for Cycle 25

Solar Flux: 336 on August 8, 2024.

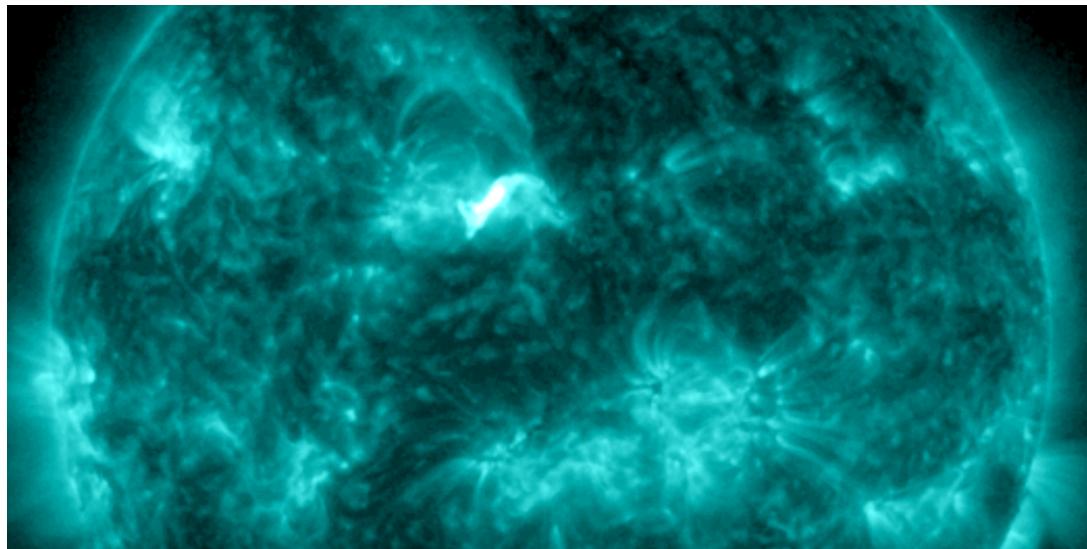
Sunspots: 382 on August 10, 2024.

Quiet Weekend

No CMEs are heading for Earth. Barring an unexpected impact from a [stealthy storm cloud](#), geomagnetic activity should remain low for the next 3 days with few auroras outside the Arctic Circle. (Copyright © [SpaceWeather.com](#) December 27, 2024. Republished by permission.)

High Solar Activity

The sun is crackling with solar flares. Witness these four M-class events within a 2 1/2 hour period on Dec. 26th:



Sunspots 3933, 3936 and 3938 are all participating--but not independently. These are "[sympathetic solar flares](#)," one triggering another, then another, in a chain reaction. Sometimes this happens when widely-spaced sunspots are connected by invisible loops of magnetism threading through the sun's high atmosphere.

The four flares pictured above combined to produce [X-ray peaks of M3 and M7](#). If the sunspots continue to work together, a powerful [X-flare](#) may be just a matter of time.

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Popular Propagation web sites

<https://prop.kc2g.com/> (Excellent Maximum Usable Frequency map)

NOAA <https://www.swpc.noaa.gov/>

<https://www.spaceweather.com/>

<https://www.solarham.com/>

<https://dx.qsl.net/propagation/>

A Propagation Tutorial

The solar X-ray flux tracks solar activity and solar flares. Solar flux, which can vary from as low as 50 to as high as 300, influences the level of ionization in the F2 region of the ionosphere, providing a very good prediction of HF DX conditions. The higher the solar flux, the better conditions will be for the higher HF frequencies and even 6 meters. However, the levels need to be maintained for some days to allow ionization in the F2 layer to build up. A solar flux of 150 results in good HF band conditions, while levels of 200 and up can provide great conditions.

Large X-ray flares on the sun can increase the ionization of the D layer of the ionosphere (a lower layer) on the sunlit side of the Earth, greatly attenuating or blocking HF radio transmissions for up to a half hour. Solar flares often produce Coronal Mass Ejections (CMEs) which, if Earth directed, can lead to geomagnetic storms. Some large flares are also accompanied by strong radio bursts that may interfere with other radio frequencies and cause problems for satellite communication and radio navigation (GPS).

The Planetary K-index is a measure of the magnitude of geomagnetic storms and is an excellent indicator of disturbances in the Earth's magnetic field. A level of 1 or 2 represents quiet geomagnetic conditions; a reading of 3 or 4 may cause some propagation deterioration; 5 and 6 are minor to moderate geomagnetic storms; and 7 to 9 are strong, severe, and extreme storm conditions. Strong geomagnetic storms can trigger Auroral displays and cause HF radio blackouts. Higher geomagnetic activity also has the adverse effect of lowering maximum usable frequencies, much like lower solar flux does.

For best conditions, the solar flux should be above 150 for a few days with the K index below 2. When these conditions are met, some good DX is likely!

-[Compiled from information on NOAA.gov and other sources]

Contest Calendar

Weekly Contests

Contest	Start UTC	End	Web Site
K1USN Slow Speed Test	Monday 0000Z	0100Z	Rules
ICWC Medium Speed Test	Monday 1300Z	1400Z	Rules
	Monday 1900Z	2000Z	
	Tuesday 0300Z	0400Z	
CWops Test (CWT)	Wednesday 1300Z	1400Z	Rules
	Wednesday 1900Z	2000Z	
	Thursday 0300Z	0400Z	
	Thursday 0700Z	0800Z	
Weekly RTTY Test	Friday 0145Z	0215Z	Rules
NCCC CW Sprint (NS)	Friday 0230Z	0300Z	Rules

Note: Start Days are in UTC, e.g. Monday at 0000 UTC is Sunday at 7:00 PM in the Central Daylight Saving Time zone, or Sunday at 6:00 PM in the Central Standard Time zone.

Full Calendar

Contest	Start	End	Web Site
RAC Winter Contest	Dec 28 0000Z	Dec 28 2359Z	Rules
Stew Perry Topband Challenge	Dec 28 1500Z	Dec 29 1500Z	Rules
ARRL RTTY Roundup	Jan 4 1800Z	Jan 5 2400Z	Rules
ARRL Kids Day	Jan 4 1800Z	Jan 4 2359Z	Rules
YB DX Contest	Jan 11 0000Z	Jan 11 2359Z	Rules
North American QSO Party, CW	Jan 11 1800Z	Jan 12 0600Z	Rules
Hungarian DX Contest	Jan 18 1200Z	Jan 19 1200Z	Rules
North American QSO Party, SSB	Jan 18 1800Z	Jan 19 0600Z	Rules
ARRL January VHF Contest	Jan 18 1900Z	Jan 20 0359Z	Rules
CQ 160-Meter Contest, CW	Jan 24 2200Z	Jan 26 2159Z	Rules
BARTG RTTY Sprint	Jan 25 1200Z	Jan 26 1200Z	Rules
Winter Field Day	Jan 25 1700Z	Jan 26 1700Z	Rules
Vermont QSO Party	Feb 1 0000Z	Feb 2 2400Z	Rules
10-10 Int. Winter Contest, SSB	Feb 1 0001Z	Feb 2 2359Z	Rules
Mexico RTTY International Contest	Feb 1 1200Z	Feb 2 2359Z	Rules
Minnesota QSO Party	Feb 1 1400Z	Feb 1 2400Z	Rules
British Columbia QSO Party	Feb 1 1600Z	Feb 2 2400Z	Rules
North American Sprint, CW	Feb 2 0000Z	Feb 2 0359Z	Rules
CQ WW RTTY WPX Contest	Feb 8 0000Z	Feb 9 2400Z	Rules

ARRL School Club Roundup	Feb 10	1300Z	Feb 14	2359Z	Rules
ARRL Inter. DX Contest, CW	Feb 15	0000Z	Feb 16	2400Z	Rules
CQ 160-Meter Contest, SSB	Feb 21	2200Z	Feb 23	2159Z	Rules
South Carolina QSO Party	Feb 22	1500Z	Feb 23	0159Z	Rules
North American QSO Party, RTTY	Feb 22	1800Z	Feb 23	0600Z	Rules
North Carolina QSO Party	Feb 23	1500Z	Feb 24	0100Z	Rules
ARRL Inter. DX Contest, SSB	Mar 1	0000Z	Mar 2	2400Z	Rules
Open Ukraine RTTY Championship	Mar 1	1800Z	Mar 2	1359Z	Rules
YB DX RTTY Contest	Mar 8	0000Z	Mar 8	2359Z	Rules
Oklahoma QSO Party	Mar 8	1400Z	Mar 9	2100Z	Rules
Stew Perry Topband Challenge	Mar 8	1500Z	Mar 9	1500Z	Rules
Idaho QSO Party	Mar 8	1900Z	Mar 9	1900Z	Rules
North American Sprint, RTTY	Mar 9	0000Z	Mar 9	0359Z	Rules
Wisconsin QSO Party	Mar 9	1800Z	Mar 10	0100Z	Rules
BARTG HF RTTY Contest	Mar 15	0200Z	Mar 17	0200Z	Rules
Russian DX Contest	Mar 15	1200Z	Mar 16	1200Z	Rules
Virginia QSO Party	Mar 15	1400Z	Mar 16	2400Z	Rules
North American SSB Sprint Contest	Mar 23	0000Z	Mar 23	0400Z	Rules
CQ WW WPX Contest, SSB	Mar 29	0000Z	Mar 30	2400Z	Rules

-[Contest data courtesy of the [WA7BNM Contest Calendar](#)]